

between the addressing scheme of the external network 119, and the addressing scheme of the network 300, the bridge 117 comprises a Network Address Translation (NAT) boundary. This technique can be utilized for company LAN's and is a 'divide and conquer' approach to the complex problem of satisfying various network's differing IP address requirements and prevents 'running out of IPV4' addresses. The external network can include e.g. CABLE-TV network 115 via Ethernet to the telephone e.g. ADSL), providing broadband connection to the Internet and WWW. The Ethernet 119 provides the bridge function to the external network. The bridge 117 or Ethernet 119 may provide the NAT address conversion function. If the Ethernet is to provide local private (to home only) addressing (e.g. as defined by then IETF standard RFC 1918) then the NAT function is in the Ethernet 119. Existing cable modems are set up with a global address and also Internet global address for the PC on the Ethernet (in this case the NAT is in the bridge 117).

**Please amend the claims as follows:**

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11. (Amended) A network system for performing a service, comprising:  
a first network including first devices interconnected via a communication medium and at least one interface device connecting said first network to at least a second network having interconnected second devices;  
an agent in each of one or more first devices adapted for:  
obtaining information from said first devices currently connected to the first network, said information including device information;  
obtaining information from the interface device about the second devices connected to the second network;  
generating a user interface description in one or more of said first devices based at least on the obtained information, the user interface description in each first device

including: (1) at least one reference associated with the device information of each of said first devices, and (2) at least one reference associated with the device information of each of said second devices.

12. (Amended) The system of claim 11, wherein said interface device includes information about the second devices.

13. (Amended) The system of claim 11, wherein the first network comprises a 1394 bus, and the second network comprises a non-1394 bus.

14. (Amended) The system of claim 13, wherein the interface device includes an address extension table for the second devices, and wherein each agent is further adapted for using the address extension table to access said second devices.

15. (Amended) The system of claim 11, wherein the interface device comprises a bridge device.

16. (Amended) The system of claim 11 wherein the agent is further adapted for displaying one or more user interfaces each based on one of said one or more user interface descriptions, on one or more devices connected to the first network capable of displaying a user interface, for user control of said first and second devices.

17. (Amended) The system of claim 16, wherein the agent is further adapted for displaying each user interface by:

using each reference in the corresponding user interface description to access the associated information in each device;

generating the user interface including device data corresponding to each device

using the accessed information in each device; and  
displaying the user interface on said device capable of displaying a user interface.

*D* 18. (Amended) The system of claim 11, wherein the agent is further adapted for generating each user interface description by: associating a hyper-text link with the device information of one or more of said first and second devices.

*B* 19. (Amended) The system of claim 11, wherein the device information in each device includes a user control interface description for user interaction with the device.

20. (Amended) The system of claim 19, wherein the agent is further adapted for generating each user interface description such that each reference in that user interface description is to at least the user control interface description in each corresponding device.